



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,663	08/06/2003	Thomas N. Kershaw	2241-1 (FJ-99-37-1)	8886
40256	7590	05/23/2005	EXAMINER	
FERRELLS, PLLC P. O. BOX 312 CLIFTON, VA 20124-1706			HUG, ERIC J	
			ART UNIT	PAPER NUMBER
			1731	
DATE MAILED: 05/23/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/635,663	Applicant(s) KERSHAW ET AL.	
	Examiner Eric Hug	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003 and 06 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 56-68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-16, 19, 42-45 and 47 is/are rejected.
- 7) ☒ Claim(s) 6, 17, 18, 20-41, 46 and 48-55 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

51

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of invention I, claims 1-55, in the reply filed on April 6, 2005 is acknowledged. The traversal is on the grounds that the products of Claims 56-68 are necessarily made by the process of Claims 1-55, the processes of Claims 1-55 make only those products substantially defined by Claims 56-68, and the products of Claims 56-68 must be made by the processes of Claims 1-55. The latter reason is not found persuasive because the product can be made by processes not utilizing embossing rolls and creping bars, for example utilizing structured forming fabrics and embossing fabrics to provide the undulatory structure and perforate embossments.

The requirement is still deemed proper and is therefore made FINAL.

Claims 56-68 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in the reply filed on April 6, 2005.

Claim Objections

Claim 26 is objected to because it should depend on claim 22, not claim 21.

Appropriate correction is required.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-16, 19, 42-45 and 47 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Baggot (US 2003/0106657).

Baggot discloses a multi-layer absorbent paper product formed with ridges and valleys extending in the machine direction and having a plurality of bridging regions formed in at least one of the layers. The bridging regions consist of embossments formed in the web having a length sufficient to extend between at least two ridges. The embossments are oriented at any angle between 0 and 180 degrees relative to the direction of the ridges. As seen in Figure 1, the embossments are oriented at 90 degrees to the ridges and valleys, thus are in the cross-machine direction. For the embodiment wherein a cross-machine direction embossment spans exactly the distance between two ridges, this is effectively a product $F \times L = 1.0$, which reads on all the claimed ranges of $F \times L$.

Art Unit: 1731

See particularly paragraphs [0044] to [0047] regarding the size, shape, spacing, and orientation of the embossments. The embossments can be any shape or size. They are shown in Figure 1 as being rectangular. Oval shape is among the several shapes expressed. Hexagonal shape is not expressed, however it would be obvious to one skilled in the art that a hexagonal shaped element can be used and is encompassed by Baggot. The length of the embossing elements must be sufficient to span two ridges. Typical lengths of 0.125 to 3.0 inches are disclosed. The depth can vary between 0.02 to 0.12 inches (20 to 120 mils). Note that in Figure 1, the bridging regions are in full step alignment. Half-step and quarter-step alignment are not expressed by Baggot, however it would also be obvious to one skilled in the art to incorporate any desired arrangement of bridging regions as suggested by Baggot, and that the claimed full-step, half-step, and quarter-step arrangements are encompassed by Baggot. Also, the embossments appear to have angled sidewalls of less than 20 degrees.

See paragraphs [0048] to [0050] regarding the embossing method. The web can be embossed using two embossing rolls, of which at least one roll comprises embossing elements.

The table in paragraph [0054] discloses one example of embossing elements having length 0.40625 inches, wherein 9 elements are arranged along 6.5 inches of cross-direction. The elements take up approx. $9 \times 0.406 \text{ in.} = 3.656 \text{ in.}$ The remaining cross-direction length is approx. 2.844 inches, for an average spacing between elements $D = 2.844/8 = 0.355 \text{ inches.}$ For a value of $F \times L$ equal to 1.0, the value of $F \times D$ is $0.355/0.40625$, or 0.875. Thus, the product of $F \times D$ for this example reads on the claimed ranges of $F \times D$.

Allowable Subject Matter

Claims 6, 17, 18, 20-25, 27-41, 46, and 48-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 26 would be allowable if rewritten to overcome the objection given above and in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 6, 27-29, 46, and 53-55 are allowable for providing perforate nips.

Claims 17, 18, 20, and 21 are allowable for providing opposing embossing elements and specifying their engagement length.

Claims 22-26 and 48-52 are allowable for providing the web with a biaxially undulatory structure.

Claims 30-41 are allowable for specifying a reduction in MD dry tensile strength, a reduction in CD dry tensile strength, and/or a gain in caliper.

Art Unit: 1731

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schutte et al (US RE 27,453) discloses an absorbent web with perforate embossments.

Conradson (US 1,384,515) discloses an absorbent web with CD oriented perforations.

Yoshioka (US 3,925,127) provides cross-hatched embossments on a creped web.

Hepford et al (US 3,940,529) discloses a web having elongated perforate embossments.

Kemp (US 3,953,638) provides MD oriented embossments on a creped web.

Trokhan (US 4,469,735) embosses a creped web.

Muller (US 2004/0163783) forms crests and depressions in a web via a first embossing station, then spot embosses the web via a second embossing station.

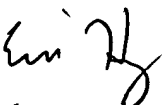
Wilhelm (US 2004/0200590) embosses a creped web with hexagonal elements.

Art Unit: 1731

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Hug whose telephone number is 571 272-1192. The examiner can normally be reached on Monday through Friday, 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


jeh